

NOTE ON LOMATOGONIUM — When Fernald (1919) discussed the taxonomy of the genus *Lomatogonium* it had not been reported in eastern North America south of the Magdalen Islands in the Gulf of St. Lawrence although the species *L. rotatum* (L.) Fries was well known along the coasts further north to Labrador and Western Greenland. Ten years later G. L. Stebbins, Jr. (1929) reported collecting this plant on August 4, 1928 at Schoodic Peninsula, Winter Harbor, Hancock County, Maine. Since 1919 there has been no other mention of *Lomatogonium rotatum* in Rhodora even in the exhaustive lists of Newfoundland and Labrador plants until it was reported from the Wolf Islands (Pike and Hodgdon 1963). This collection was made by A. R. Hodgdon 15 August 1960 on the northeast side of South Wolf near the beach of a small cove, since named Lomatogonium Cove. One dense clump formed a single station for this plant and only a few specimens were taken for the record. These have been deposited in the herbarium of the University of New Hampshire. The most careful search of this cove for the past three seasons has failed to reveal a single additional specimen. The site where the collection was made was a turfy bank vulnerable to northeast storms not far above the tide mark. A northeast gale occurred in the Bay of Fundy during the winter of 1960-61 at a period of high tides causing severe erosion on exposed shores. Thus, the site may have been washed away. However, it hardly seems credible that all the seeds of this profusely seeding annual plant would have been destroyed or eliminated. As some members of the Gentian family have seeds with long delayed dormancy it is hoped that this attractive gentian-like plant may reappear on the Wolves.

While hunting for *Primula laurentiana* along the Maine coast (Pike 1963) on September 15 of this past season I found *Lomatogonium rotatum* growing on two islands in Englishman's Bay off Jonesport in Washington County. These islands are nearly midway between the Stebbins station at Schoodic Point and that on the Wolf Islands in New Brunswick. My first collection was on Water Island which is hardly more than a large granite ledge some 15 or 20 feet

above high water with humus deposits and pools in protected depressions. One of these depressions on the shoreward side of the island was covered with a dense mat of *Potentilla anserina* or *P. Egedei* var. *groenlandica* (positive identification of which has not yet been made) throughout which were scattered plants of *Lomatogonium rotatum* in full bloom. Specimens for the plant press and the greenhouse were both collected leaving a large proportion of the colony for reproduction. Later the same day this rare plant was found on nearby Mistake Island again growing in turf in crevices of the granite ledges close to Moose Peak Light. Associated with it in this case were *Primula laurentiana*, *Sagina procumbens*, and *Plantago juncoides*. The stature of the plants was considerably less here than on Water Island, some of them being less than an inch high yet in full bloom.

Fernald (1929) chose *Lomatogonium rotatum* as one of four species to illustrate epibiotic flora that in his opinion escaped the last glaciation. Hultén, (1955) in discussing the isolation of the Scandinavian Mountain Flora, cites *Lomatogonium rotatum* as one of a group "... of mountain plants with very wide gaps in their area" which "... have long been recognized as being very isolated in the Fenno-scandian mountains." He also regards the distribution pattern of this plant as due to escape from glaciation.

The occurrence of these four stations raises some interesting questions concerning the history of the flora of the Maine Coast and Bay of Fundy and indicates the desirability of close scrutiny of other headlands and outlying islands.

Specimens of these collections are deposited in the Herbaria of the New England Botanical Club and of the University of New Hampshire.

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A BUTTRESSED ELM FROM ONTARIO — Buttressing is a feature commonly associated with tropical trees, although *Ulmus americana* L. as a street tree sometimes shows a tendency toward buttress roots, occasionally (Washington, D. C., Amherst, Mass.) producing tiny buttresses 3-5 dm high. In 1958, during a brief visit to Rondeau Provincial Park, Ontario, on the north shore of Lake Erie, I was surprised to see a great elm, about 30-35 m tall and with a trunk 6-7 dm thick, which had wide buttresses about 2 m high. This tree was in the central part of the park, in deep beech-maple forest with a scattering of other trees, including elms and an enormous *Populus deltoides*, taller and much thicker than the buttressed elm. It was not possible to be positive as to which species of *Ulmus* the buttressed tree belonged, but its form suggested *U. americana*. Examination showed that most of the trees in the immediate area had some slight development of buttresses. The area is low and rather swampy, with very low parallel ridges of sand. *Boehmeria cylindrica*, *Collinsonia canadensis*, and *Onoclea sensibilis* were the common herbs, forming a dense ground cover.

In the tropics buttressing is frequently associated with swampy ground, but is by no means confined to trees in such habitats. In *Ceiba pentandra*, at least, it has been shown to be genetic (according to H. G. Baker, in talk given August 26, 1963 at Amherst, Mass.), rather than directly ecological in origin. It would be interesting to know how general the tendency toward buttressing is in the elms, and if it is more pronounced in swamps.

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